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| 09/970,312 | 10/02/2001 | Kuldeep K. Dhar | 1194.12-0002 | 9682 |
| 164 7590 01/09/2008 KINNEY & LANGE, P.A. THE KINNEY & LANGE BUILDING 312 SOUTH THIRD STREET MINNEAPOLIS, MN 55415-1002 | | | EXAMINER DESHPANDE, KALYAN K | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/970,312

Applicant(s)

DHAR ET AL.

Examiner

Kalyan K. Deshpande

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/2/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Introduction

1. The following is a non-final office action in response to the communications received on October 15, 2007. Claims 1-14 and 21-27 are now pending in this application.

Response to Amendment

2. Applicants' amendments to claims 1-5, 8, 10-11, 13, 21-22, and 25-27. Examiner maintains all previously asserted grounds of rejection.

Response to Arguments

3. Applicants' arguments filed on October 15, 2007 have been fully considered but are moot in view of the new ground(s) of rejection in part and are not found persuasive in part. Examiner finds Applicants' amendments to the claims sufficient the cure all 35 U.S.C. 112 2nd paragraph issues and withdraws the previously asserted 35 U.S.C. 112 2nd paragraph rejections. Applicants further argue the claims as amended and as such are directed to the discussion of the rejection of the claims below.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14 and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bengston (U.S. Patent No. 6728947) in view of Nichols et al. (U.S.

Patent No. 6018730) and Bacon et al. (U.S. Patent No. 6430538) and in further view of DeFrancesco et al. (U.S. Patent Publication No. 20010014877).

As per claim 1, Bengston teaches:

A workflow management system for hosting process-based tasks and decisioning, the workflow management system (see Bengston Abstract) comprising:

A collection of software components on a single platform, the collection comprising (see Bengston Abstract; where workflow utilizes a plurality of software components for the execution of the workflow file.):

A software component for business users to establish configurable workflow checklists in real-time in which a plurality of differentiated tasks are set up and are made available for configuring any type of workflow (see Bengston column 4 lines 45-65, column 6 lines 26-67, column 7 lines 30-58, column 9 lines 1-33, and figures 3, 6, and 7; where the system processes steps and functions of a workflow. The reference invention is a software component enabling the processing of the workflow. Figure 3 displays one of the plurality of functions that are part of the reference invention. Each workflow definition is created by linking nodes, where each node represents a different task. The linking between the nodes can be simple or complex and dependant. The workflow definition can be created prior to execution, where execution is the same as runtime.);

Wherein each workflow task can avail a plurality of existing or new underlying business parameter objects that can be embedded for workflow task automation

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(see Bengston column 10 lines 14-45; where each workflow task has associated business parameters associated with it.);

Wherein the software component for business users includes a graphical interface usable to configure workflows runtime, wherein runtime follows a software programming stage, the graphical user interface having a list of business parameter objects represented as geometric shapes and a workspace, each business parameter object represented as a geometric shape being an abstracted object-based representation of functions within the collection of software components, the workspace for organizing and linking multiple geometric shapes at runtime in an ordered arrangement of objects, the ordered arrangement of objects corresponding to an order in which the multiple differentiated tasks are performed when any of the configurable workflow checklists are executed (see Bengston column 6 lines 26-67, column 7 lines 1-29, and figure 2; where a workflow designer can create or edit a workflow. The functions are represented by icons. The designer can create a workflow by organizing and assembling the icons. The designers screen is split, where one portion is reserved for displaying the plurality of icons and the remaining portion available to be used as workspace. The designer can drag-and-drop the icons on to the workspace to create the workflow.); and

A database for storing the arrangement of objects in the configurable workflow checklists as well as for storing the entry conditions and embedding information for the business parameter objects that are associated with each of the multiple differentiated tasks (see Bengston column 9 lines 55-67, column 10 lines 1-34, and

figures 2 and 3; where processes and workflows can be saved to RAM or to disk in various forms.).

Bengston fails to explicitly teach “a data dictionary associated with each workflow, wherein each workflow is driven by the associated data dictionary for a selected industry to which that workflow corresponds, the software component for business users having the ability to use, handle and manage the data dictionary and to generate entry conditions and rules dynamically without restarting applications or rewriting underlying software code”. Nichols in an analogous art teaches “a data dictionary associated with each workflow, wherein each workflow is driven by the associated data dictionary for a selected industry to which that workflow corresponds, the software component for business users having the ability to use, handle and manage the data dictionary” (see Nichols column 21 lines 31-67, column 22 lines 1-40, and column 59 line 25 – column 64 line 45; where a data dictionary is disclosed. The data dictionary has a domain component that defines the data dictionary as related to a specific industry. The examples provided include insurance underwriting and credit lending). Bacon, in an analogous art, teach “generate entry conditions and rules dynamically without restarting applications or rewriting underlying software code” (see Bacon column 5 lines 23-48, column 9 lines 27-38, column 10 lines 27-40, and column 13 lines 1-6; where entry conditions associated with activities are stored in a database. The entry conditions are used to evaluate the next activity in the workflow process. The set of conditions are evaluated as true/false conclusions and a particular activity is determined to be performed based on the conclusion of the true/false assessment.).

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DeFrancesco, in an analogous art, teaches “generate entry conditions and rules dynamically without restarting applications or rewriting underlying software code” (see DeFrancesco paragraph 24; where the workflow configuration tool is enabled to define customized workflow requirements at run-time thereby alleviating the need to customize source code and without restarting applications.). The advantage of using these features are that they streamline the use of automated tools reducing overall costs. It would have been obvious, at the time of the invention, to one of ordinary skill in the art to combine the features of “a data dictionary associated with each workflow, wherein each workflow is driven by the associated data dictionary for a selected industry to which that workflow corresponds, the software component for business users having the ability to use, handle and manage the data dictionary and to generate entry conditions and rules dynamically without restarting applications or rewriting underlying software code” taught by Nichols, Bacon, and DeFrancesco to the Bengston system in order to streamline the automation of processes thereby reducing overall costs, which is a goal of Bengston (see column 1 lines 55-67 and column 2 lines 1-4).

As per claim 2, Bengston teaches “administrative tools for accessing one or more stored configurable workflow checklists, the administrative tools capable of modifying any of the stored configurable workflow checklists for adding and deleting a differentiated task and for redefining a degree of automation for each task by embedding new or existing business parameter objects”. Claim 2 further recites that the workflow checklists can be modified “in real-time without impacting underlying software

code". This limitation is already addressed by the rejection of claim 1; therefore the same rejection applies to this claim as well.

As per claim 3, Bengston teaches "wherein multiple checklists and associated data dictionaries can be stored in the database, and wherein each of the checklists and data dictionaries is accessible" (see Bengston column 9 lines 55-67, column 10 lines 1-34, and figures 2 and 3; where processes and workflows can be saved to RAM or to disk in various forms.). Claim 3 further recites the checklists are configurable "reconfigurable at runtime without restarting or reprogramming underlying code for the collection of software components". This limitation is already addressed by the rejection of claim 1; therefore the same rejection applies to this claim.

As per claim 4, Bengston fails to teach "wherein the graphical interface permits dynamic alteration of the ordered arrangement of objects in the stored checklist at run time without restarting the system". DeFrancesco teaches this limitation as discussed in claim 1; therefore the same rejection from claim 1 applies to this claim.

As per claim 5, Bengston teaches "wherein the graphical interface is web-enabled, such that a remote user can access the collection of software components via the graphical interface to modify the ordered arrangement of objects in the stored configurable workflow checklist" (see Bengston column 4 lines 66-67, column 5 lines 1-45, column 6 lines 4-25, and figure 1 and 2; where the system uses a communications channel that is connected to the Internet. The editing device can be enabled in any web browser such as Netscape Navigator or Internet Explorer.).

As per claim 6, Bengston teaches "an automated messaging system for communicating action items with registered users in the system, the messaging system being Internet-based" (see Bengston column 14 lines 16-40; where parameters can be adjusted such that email message, a phone call, or a paging message can be sent to defined users regarding the status of action items of the workflow.).

As per claim 7, Bengston teaches "wherein the automated messaging system includes electronic mail" (see Bengston column 14 lines 16-40; where parameters can be adjusted such that email message, a phone call, or a paging message can be sent to defined users regarding the status of action items of the workflow.).

As per claim 8, Bengston teaches "a workflow system for programmatically managing dynamic workflow processes" (see Bengston Abstract), "the workflow system comprising: a rules database containing logical mathematical operators" (see Bengston column 6 lines 26-67, column 7 lines 1-29, and figure 2; where each icon is associated with parameters and rules. The icons and rules are stored in a database.), "a workflow engine for performing task list processing as defined by a plurality of task lists, with any number of the plurality of task lists processed by the workflow engine at any given time, the workflow engine being a software component containing a plurality of discrete functions defined for each application within the workflow system prior to runtime" (see Bengston column 4 lines 45-65, column 6 lines 26-67, column 7 lines 30-58, column 9 lines 1-33, and figures 3, 6, and 7; where the system processes steps and functions of a workflow. The reference invention is a software component enabling the processing of the workflow. Figure 3 displays one of the plurality of functions that are part of the

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reference invention. Each workflow definition is created by linking nodes, where each node represents a different task. The linking between the nodes can be simple or complex and dependant. The workflow definition can be created prior to execution, where execution is the same as runtime.), "a workflow designer for configuring the plurality of task lists, the workflow designer having an object-based interface for creation and modification of task lists using functionality of a drag-and-drop approach" (see Bengston column 6 lines 26-67, column 7 lines 1-29, and figure 2; where a workflow configuration tool is disclosed. A designer can drag and drop icons to create a workflow.), "the workflow designer having a display window comprising: a function list containing multiple symbols, each symbol corresponding to at least one of the plurality of discrete functions accessible within the workflow engine" (see Bengston column 6 lines 26-67, column 7 lines 1-29, and figure 2;), "a business parameter object list, each business parameter object able to be embedded with any of the discrete functions represented as symbols" (see Bengston column 6 lines 26-67, column 7 lines 1-29, column 10 lines 14-45, and figure 2; where each task has business parameters associated with it.), "a workspace providing a graphical area for assembly of ordered task lists, the workflow designer allowing for assembly of ordered tasks by dragging and dropping one of the multiple symbols into the workspace, and embedding business parameter objects with any of the discrete functions represented as symbols, the workflow designer provides graphical links for assembling and reassembling an ordered task list from multiple symbols" (see Bengston column 6 lines 26-67, column 7 lines 1-29, and figure 2; where a workflow designer can create or edit a workflow. The

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functions are represented by icons. The designer can create a workflow by organizing and assembling the icons. The designers screen is split, where one portion is reserved for displaying the plurality of icons and the remaining portion available to be used as workspace. The designer can drag-and-drop the icons on to the workspace to create the workflow.), and “wherein the workflow engine performs discrete functions in an order determined by the ordered task list” (see column 4 lines 45-65, column 6 lines 26-67, column 7 lines 1-29, and figures 2, 3, 6, and 7; where the system performs the discrete functions ordered and listed in the workflow by the workflow designer.). Bengston fails to explicitly teach “a rules database containing logical mathematical operators”, “tools configuring entry conditions associated with any of the plurality of discrete functions for each task list according to logical mathematical operators selected from the rules database, wherein each entry condition is evaluated by the workflow engine with respect to each of the plurality of discrete functions such that a particular one of the plurality of discrete functions is executed by the workflow engine only if all of the entry conditions associated with that particular one of the plurality of discrete functions evaluate to true”, “a data dictionary configurable for each task list for defining discrete data elements and data relationships that are associated with each of the plurality of discrete functions of the workflow engine, wherein the contents of each data dictionary are specific to a selected industry”, and the workflow definitions and tasks can be modified “in real time without restarting applications or rewriting underlying software programming”. These limitations are already addressed by the rejection of claim 1; therefore the same rejection applies to this claim.

Claims 9-14 recite limitations already addressed by the rejections of claims 1-8; therefore the same rejections apply to these claims.

Claims 21-27 recite "a system for programmatically rendering a process-based decision" taught by Bengston (see Bengston Abstract). Claims 21-27 further recite limitations already addressed by the rejection of claims 1-8; therefore the same rejection applies to these claims.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalyan K. Deshpande whose telephone number is (571)272-5880. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/kkd/


BETH VAN DOREN
PRIMARY EXAMINER